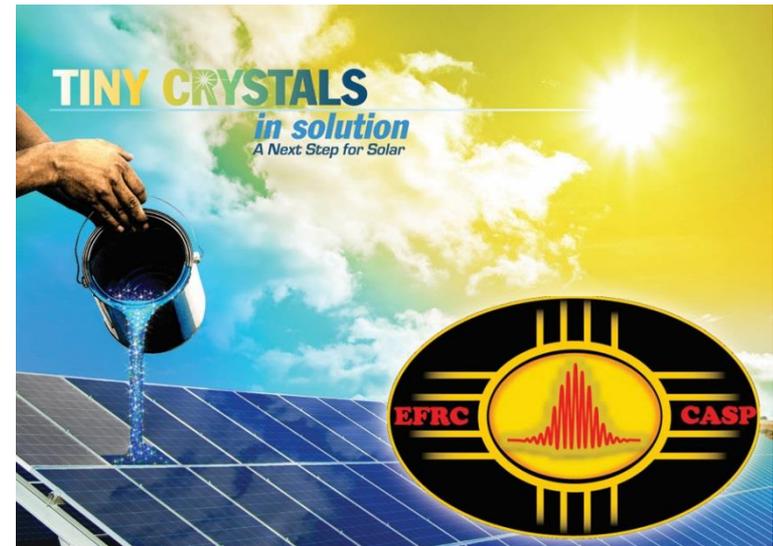


Center for Advanced Solar Photophysics (CASp) Victor I. Klimov (Los Alamos National Laboratory)

The purpose of this center is to explore, design and apply the unique interactions of *nanomaterials* with light to enable *disruptive advances* in the efficiency of solar energy capture and conversion.

<http://casp.lanl.gov>

<http://www.centerforadvancedsolarphtophysics.org>



RESEARCH PLAN

Our focus is on fundamental physics and chemistry of solution-processible semiconductor nanocrystals specifically designed to exhibit novel phenomena that will enhance the conversion of sunlight into electricity. The desired outcomes of this work are effective, low-cost schemes for light harvesting and conversion using approaches such as up- and down-conversion, carrier multiplication, and controlled coupling in mesoscopic nanocrystal assemblies.